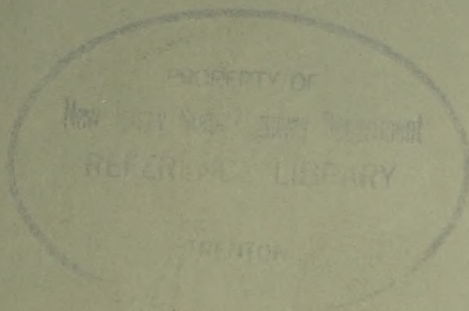


*D.P.* *Lisher* ✓  
**1947 -  
1948**

**STATE OF NEW JERSEY**

**HIGHWAY DEPARTMENT**

NJ  
TE  
24  
N5  
R4  
1947-1948  
C.2







**STATE OF NEW JERSEY**

NJDOT RESEARCH LIBRARY

**HIGHWAY DEPARTMENT**

SPENCER MILLER, JR. STATE HIGHWAY COMMISSIONER

NJ  
TE  
24  
N5  
R4  
1947-  
1948  
C-2

A decorative graphic consisting of a grid of red lines forming a series of overlapping diamond shapes, centered on the page and partially overlapping the text.

# **REPORT FOR 1947-1948**



To the Governor and the Legislature  
of the State of New Jersey:

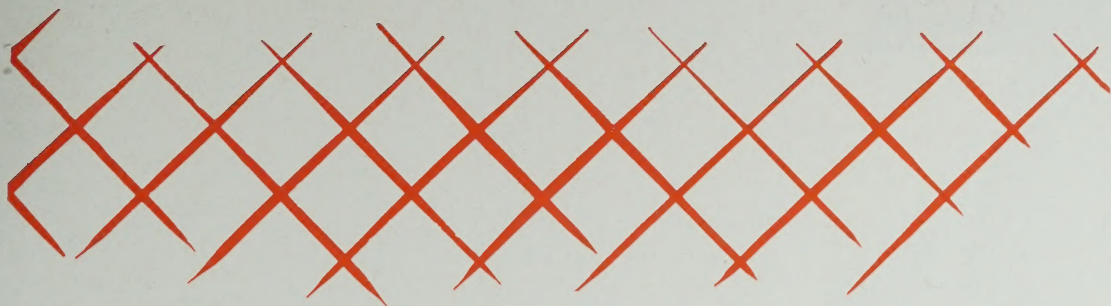
I am submitting herewith a Report of the major activities of the New Jersey State Highway Department for the fiscal year 1947-1948, together with a Report of Financial Operations of the Department for this same period.

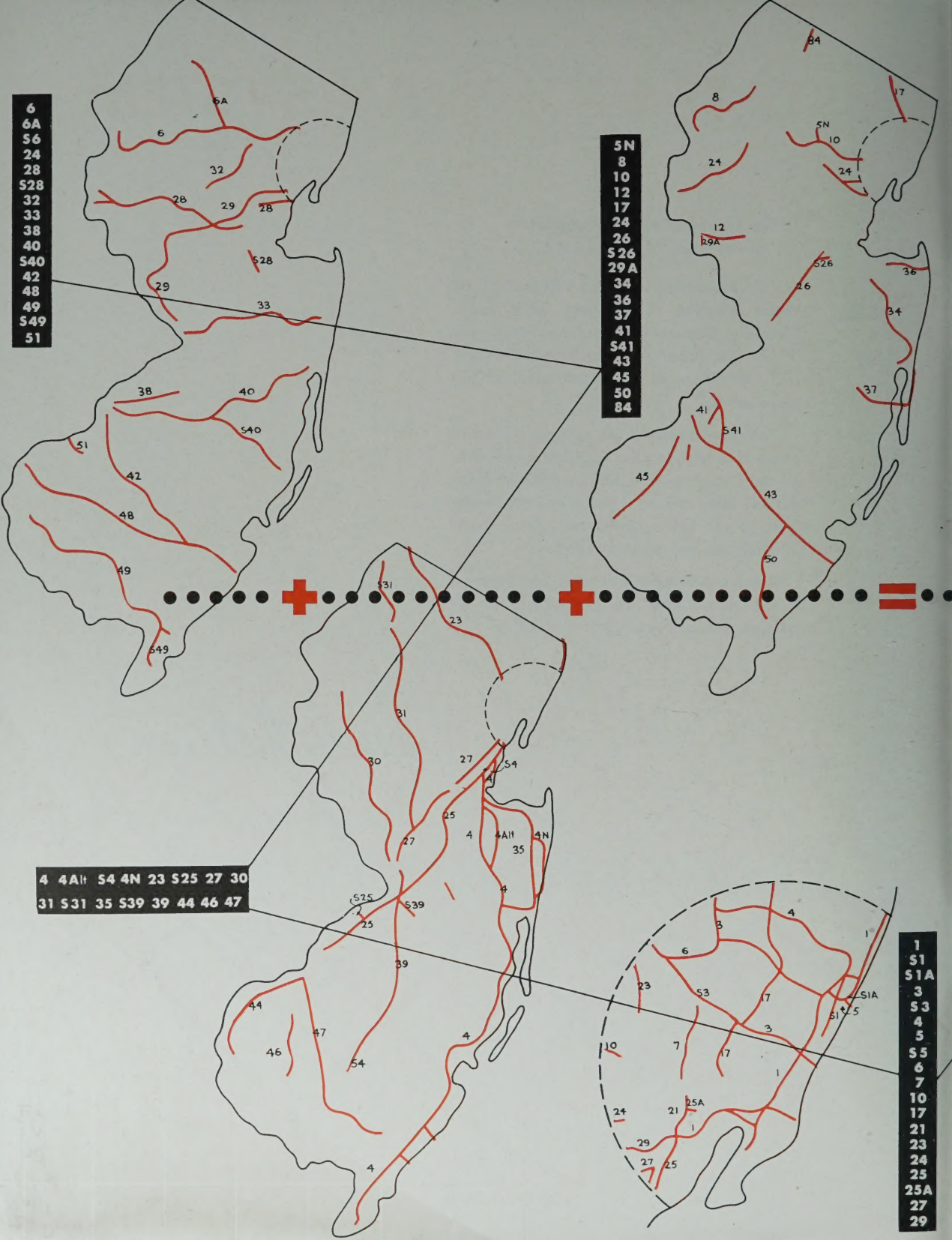
The report follows the pattern of recent years in condensing the account of activities of the Department, within convenient limits for the information of the Governor, members of the State Legislature, government officials and the general public.

A more detailed report may be consulted in the New Jersey State Library or at the offices of the Department in Trenton.

*Spencer Miller, JR*

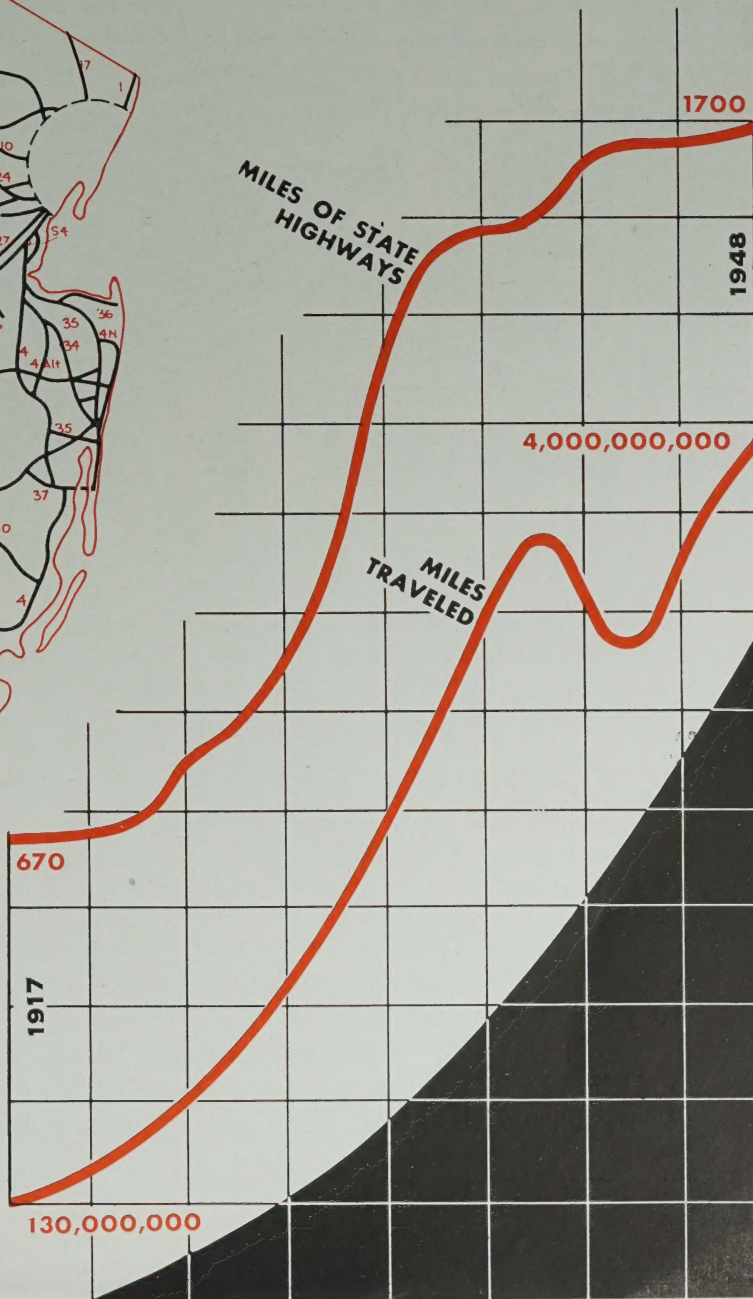
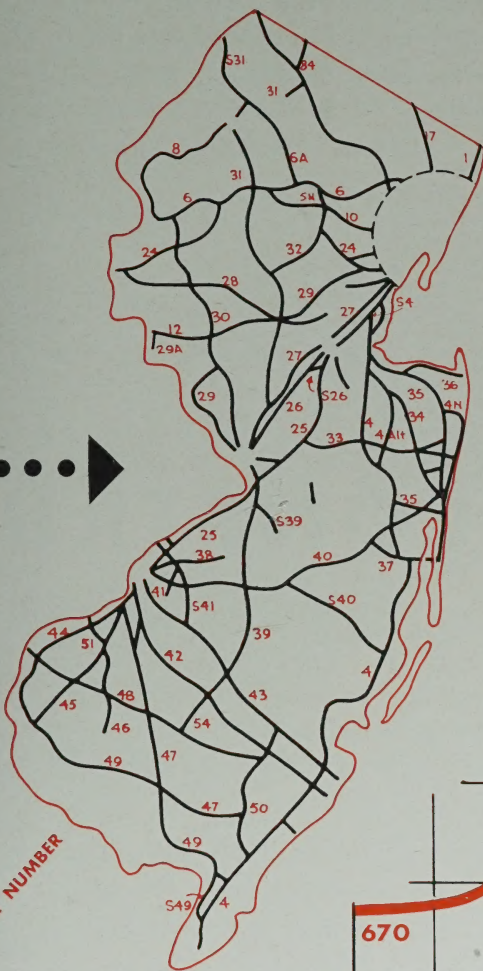
STATE HIGHWAY COMMISSIONER







# STATE HIGHWAY SYSTEM



ALL  
STATE  
HIGHWAYS  
ARE  
MAINTAINED  
BY  
THE  
STATE  
DEPARTMENT  
OF  
TRANSPORTATION

The past year was one of generally increased activity with further limitations upon personnel. Contracts in the amount of \$31,064,000 were awarded for the construction of roads, bridges, and the acquisition of rights of way on the state highway system.

To prosecute this volume of work and prepare plans for the next fiscal year, it was necessary to place several of the larger projects in the hands of consultants. Among these were the design of several bridges on the Route 4 Parkway, Route 25, the Newark Viaduct, the Route 100 Freeway in Bergen and Hudson Counties, preliminary study and plans for the Palisades Interstate Parkway, the East-West Freeway and Route 10 through Newark, Route S-28 through New Brunswick and studies for the Bayonne Freeway in Hudson County.

### DEVELOPMENTS

The outstanding accomplishment was the new development in building roadways across unstable meadow areas by the use of the so-called sand-drain or sand-well method. This enables the con-

# I DESIGN & CONSTRUCT

struction of solid or stable roadbeds without the expensive procedure of removing all the unstable muck and the refilling of the area with good material which often has to be hauled long distances and at great expense. Since its conception it has proven to be economical and satisfactory on many highway projects along the Pacific Coast.

This method of stabilizing inferior soil is being successfully used over the Hackensack River meadows on Route 3 near Secaucus. Its use is also planned for the Route 100 Freeway north of the Rahway River in Union County, and at the approaches to the Manasquan River Bridge in Monmouth County.

The increase in the size, weight and type of vehicular traffic, the advances in scientific research and materials, and the technological improvements in construction, machinery and equipment present a continually changing problem in highway design and construction. New Jersey has kept abreast of these changes in her highway building. While steeped in the tradition of the past, the State has constantly striven to keep abreast of modern trends by mutual discussion and interchange of ideas with others, and by diligent research on its own highway system.



**1970** TRAFFIC VOLUMES  
LEGISLATED STATE HIGHWAY SYSTEM

ON



Route 3—Secaucus Relocation

Route S-3—Bergen and Passaic Counties

Route 6—Singac to Totowa, Passaic County

Route 6-A—Picatinny Interchange to Lake Hopatcong, Morris County

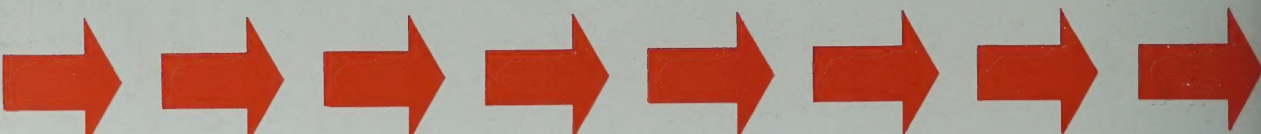
Route 23—Sussex County

Route 4 Parkway—Union and Middlesex Counties

Route 100 Freeway—Union and Middlesex Counties

Route 25—Newark Viaduct, Essex County

Route 25-A—Essex and Hudson Counties



Route 28—Hunterdon and Somerset Counties

Route 25—Yardville to Robbinsville, Mercer County

Route 25—Cranbury to Hightstown, Mercer and Middlesex Counties

Route 29—Somerville to Chimney Rock, Somerset County

Route 39—White Horse, Mercer County

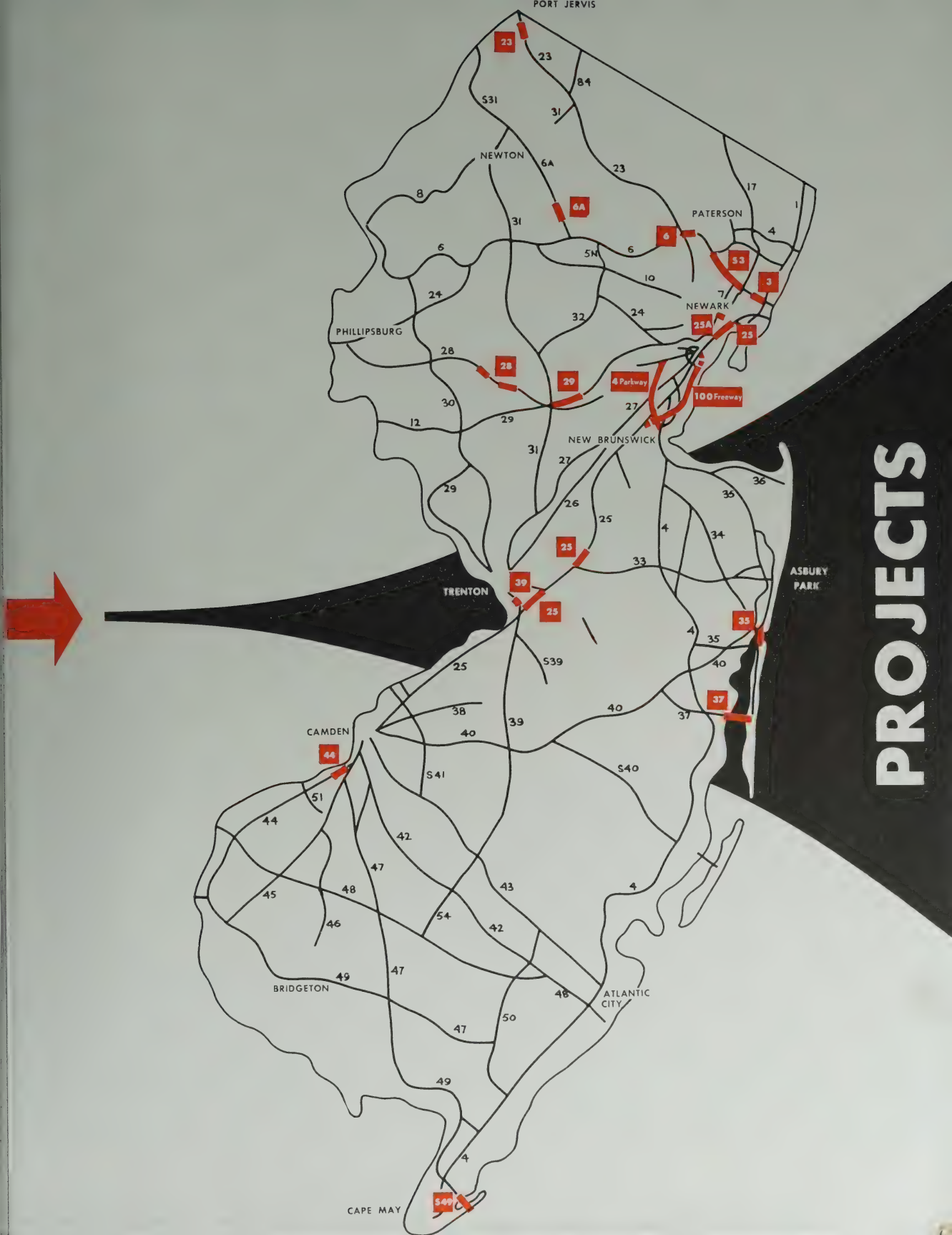
Route 35—Manasquan River Bridge, Monmouth and Ocean Counties

Route S-49—Grassy Sound Bridge, Cape May County

Route 37—Island Heights-Seaside Heights Bridge, Ocean County

Route 44—Westville to Verga, Gloucester County.





# PROJECTS

### ROUTE 3

Secaucus Relocation, Hudson County . . . This new relocation, a dual highway improvement, will connect with the approaches to the Lincoln Tunnel and relieve truck, bus and passenger traffic from the north and west which now passes through Secaucus. The existing route through the town was constructed in 1928, prior to the projection of the Lincoln Tunnel, and has become a bottleneck with serious effects upon community activities.

Part of the relocation has been completed from the Paterson Plank Road in Bergen County, southerly and easterly across the Hackensack River, to a connection with Grace Street in Secaucus. At present it carries more than ten million vehicles a year. Traffic congestion required that this by-pass be constructed through Hudson County on a new alignment.

### ROUTE S-3

Bergen and Passaic Counties . . . Route S-3 extends from Route 3 at East Rutherford to Route 6 at Great Notch in Passaic County. Construction has been completed between East Rutherford and Rutherford in Bergen County. In the fall of 1945 traffic on this section totaled 6,900 cars daily. In the spring of 1948 the average daily volume was 14,000 vehicles, an increase of 103 percent.

This new east-west artery will carry traffic

ROUTE S-3—RUTHERFORD-EAST RUTHERFORD—BERGEN COUNTY.

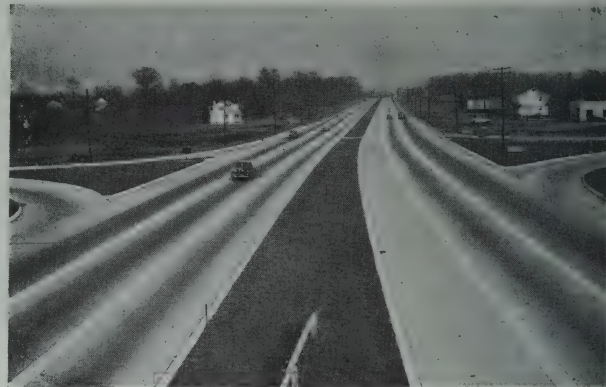


from the north and west on a direct course to the Lincoln Tunnel and the New Jersey waterfront. It will also serve the cities of Clifton, Passaic and Rutherford and the municipalities of northern Essex County. Annual traffic over the route will total 5,475,000 vehicles, and the yearly tonnage will approximate 4,500,000.

Grading for this new expressway has been completed between Rutherford and Great Notch, preparatory to paving in 1948.

### ROUTE 6

This improvement extends from Totowa to the intersection of Routes 6 and 23 at Singac in Passaic County. Dualization was provided by



ROUTE 6—REFLECTING AND AUDIBLE LANE MARKERS—SINGAC-TOTOWA

building a new west-bound highway north of the existing road at distances varying from 260 to 270 feet. Traffic was diverted over the new roadway, and the existing two-lane pavement rebuilt 20 feet north of its present location.

Bridges with necessary ramps and connections were constructed at Riverview Drive and Union Avenue in Totowa to facilitate traffic movement which was retarded by traffic lights at these intersections.

### ROUTE 6-A

Picatinny Interchange to Lake Hopatcong, Morris County . . . The Picatinny Interchange was constructed under the Federal Aid Defense Act of 1941 to relieve traffic congestion in the vicinity of the Arsenal. This additional improvement extends northerly for 2½ miles to Tierney's Corner near Lake Hopatcong. Operations consisted of the elimination or flattening of sharp





ROUTE 6-A—PICATINNY INTERCHANGE—MORRIS COUNTY.



curves, grade changes to provide adequate sight distances, and widening of the existing roadway. The new pavement width varies between 24 and 30 feet. The average grade over Mase Mountain was reduced to approximately eight per cent, and a new bridge constructed over the Rockaway River. All operations were confined within the existing 66 foot right of way.

#### ROUTE 23

Extending for 2½ miles from the top of the mountain near High Point Park westerly toward Port Jervis, this improvement consisted principally of grading, shale being used from the adjacent park property in the grading area. No surfacing or oiling was performed under the contract.

Steep grades up to 15 per cent were encountered with very sharp curves. The sharper curves were eased, and in one area near Port Jervis, a cut-off was constructed to eliminate a dangerous hair-pin turn.

## ROUTE 4 PARKWAY

Union and Middlesex Counties . . . Plans were prepared and ground broken for the first section of the Route 4 Parkway at Cranford, Union County, in November of 1946.

With the appropriation of \$8,300,000 in the 1947 fiscal year, construction has moved rapidly forward, consisting of the acquisition of rights of way, drainage, grading, salvaging of existing trees and shrubs, and the building of bridges at Central Avenue and the Middlesex Reservoir in Clark Township, Union County.

An appropriation of \$5,500,000 in the present fiscal year provides for the construction of bridges from Centennial Avenue in Cranford, to N. J. Route 27 at Iselin in Middlesex County.

Operations extend for 10 miles from the Lehigh Valley Railroad in Cranford, to N. J. Route 35 at Perth Amboy.

## ROUTE 100 FREEWAY

Middlesex and Union Counties . . . This new freeway will extend from the George Washington Bridge southerly to the vicinity of the Raritan River. The Legislature appropriated \$8,300,000 in the 1947 fiscal year, covering drainage, grading, minor bridges and rights of way.

Future plans provide for the construction of that portion of the freeway from Route 35 in Middlesex County northerly into Elizabeth, and of Route S-100 through Elizabeth to a connection with the Route 25-dual-dual expressway.

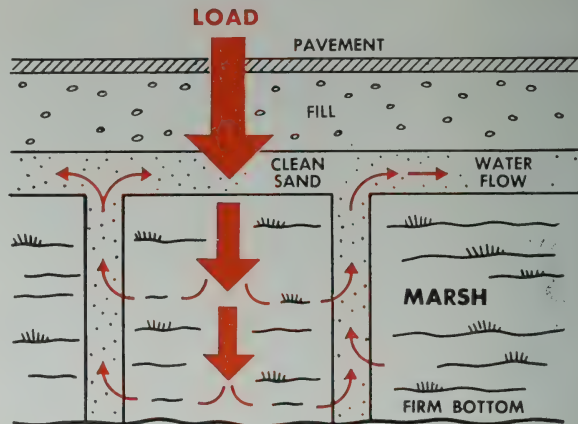
At present, Route 25 at this location carries an average daily traffic of 50,000 vehicles, much of it heavy trucking, causing costly delays through Elizabeth and south thereof. The new freeway will materially relieve this congestion.

The vertical sand drain method of stabilizing soft, wet soil is being used over sections of the new freeway. By covering a swamp or marsh with a layer of sand, installing vertical sand drains through the unsuitable soil to firm bottom, and finally constructing the fill, the area is rapidly stabilized. The weight of the fill squeezes the water beneath the roadbed into the vertical sand drains which act as wicks to carry the water up to the sand layers. This blanket of sand enables the water to flow into the swamp or marsh adjacent to the highway. Aside from the con-



ROUTE 4 PARKWAY—COMPLETED GRADING.

struction savings, it also enhances the economic development of highway marginal land in tidal marshes and swamps.

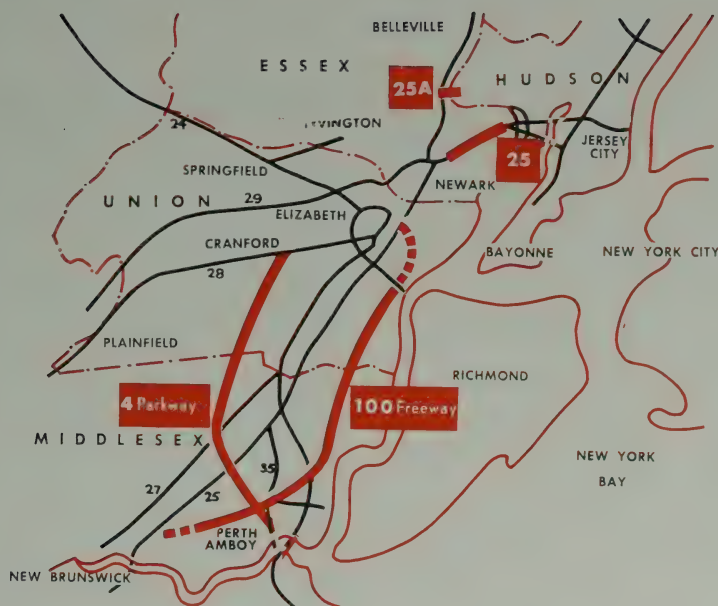


VERTICAL SAND DRAINS

## ROUTE 25

Newark Viaduct, Essex County . . . This new viaduct, extending from the Newark Airport to Foundry Street, will connect with the Pulaski Skyway. It will parallel the existing Route 25 viaduct





to the east, and provide eight express lanes from the Skyway to Elizabeth.

Present contracts are for grading, drainage, crib-wall and other construction features, except paving. Bridges over various streets and railroads are also being constructed, so that grading can be consolidated with the fill back of the bridges. Paving of the viaduct is being undertaken under subsequent contracts.

#### ROUTE 25-A

Essex and Hudson Counties . . . Route 25-A was first legislated to extend from Harrison in Hudson County to Broad Street in Newark. Because Broad Street was considered too busy a thoroughfare on which to discharge added traffic volumes, subsequent legislation has extended the highway to Clifton Avenue in Newark.

The immediate need for this artery is in the Newark-Harrison area. The two principal crossings connecting Newark and Harrison are at Clay and Bridge Streets. When operating, both bridges carried over 40,000 vehicles daily. The closing of the Bridge Street span has resulted in an unbalancing of the traffic pattern in this area.

The new crossing is located between the two existing bridges and parallels the D. L. & W. Railroad to the north. It will be an important facility for the people of Hudson and Essex Counties.

Additional operations consist of the building of connecting ramps from Route 21, and the construction from the east side of Route 21 to and including the bridge that spans Passaic Avenue in Harrison. The approaches are circular ramps with approximate grades of four and six percent.

ROUTE 25—NEWARK VIADUCT—ESSEX COUNTY.



ROUTE 25-A—NEWARK-HARRISON—ESSEX AND HUDSON COUNTIES.



## ROUTE 25

Cranbury to Hightstown, Mercer & Middlesex Counties . . . This was one of the last remaining sections between the Holland Tunnel and Camden not dualized. A center island and two 12-foot roadway lanes were constructed on the easterly side of the existing highway.

Research and experimentation were carried on by constructing a continuous double line reinforced concrete pavement 24 feet wide for approximately 5,000 feet with a 14-inch sub-base. Another continuous section of 10-inch reinforced concrete pavement was placed for the same distance, using 12 inches of selected sub-base.

Traffic over this section of highway totals 2,190,000 vehicles per year, with an annual tonnage of 3,500,000. Before improvement it had a relatively high accident rate with 73 accidents, 65 injuries and 1.3 fatalities per 10 million car miles.

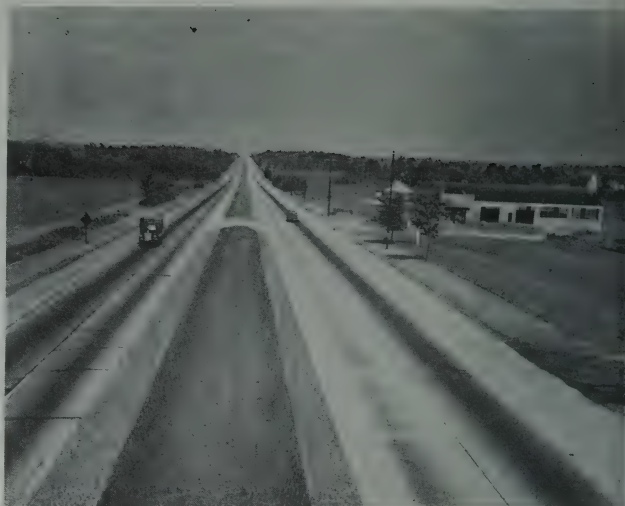
## ROUTE 25

Yardville to Robbinsville, Mercer County . . . This improvement comprised the dualization of another heavily-trafficked section of Route 25 which carries a large volume of trucking from the south and west to the markets of New York and the east.

Two new 12-foot lanes of single line reinforced concrete with center island and shoulder were added to the existing pavement to form the dual highway. A bituminous surface was placed on the existing 20-foot pavement for the convenience of south-bound traffic. Mud-jacking was also undertaken to form a 600-foot banked curve. As an experiment, slab lengths of 56'-4", 67'-3" and 89'-1" were varied in each mile of the new pavement.

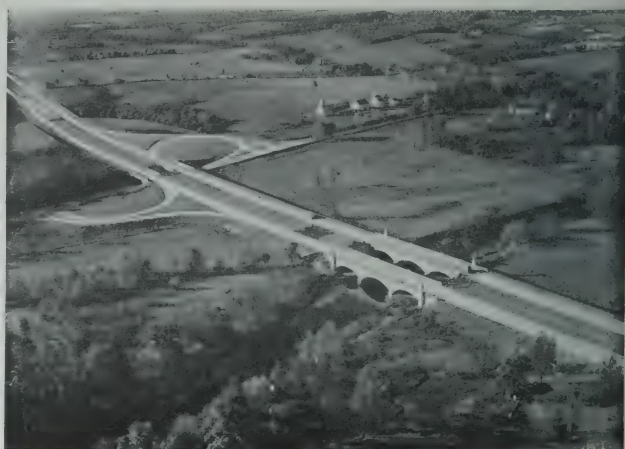
## ROUTE 28

Hunterdon and Somerset Counties . . . Contracts were completed for the dualization of two gaps on Route 28, between Van Syckle's Corner and White House in Hunterdon County, and between the White House and the North Branch Relocations in Hunterdon and Somerset Counties. The grading for these improvements was performed under previous contracts. This dual



CONTINUOUS PAVEMENT—RIGHT—CRANBURY TO HIGHTSTOWN

ROUTE 28—THE BLUE STAR DRIVE—SOMERSET COUNTY.





improvement will form part of the "Blue Star Drive" extending across New Jersey from Newark to Phillipsburg.

#### ROUTE 29

Operations were undertaken to remedy the pumping of joints and deterioration of this pavement, which has been under continuously heavy traffic since 1930. These consisted of drainage, rebuilding of shoulders with a 12-inch foundation of sub-base and repairs to the existing reinforced concrete. Defective slabs were replaced and others mudjacked to stabilize the existing pavement. The concrete was then surfaced with a two-inch bituminous top.

This is the last section between Newark and the Somerville Circle remaining to be dualized. The yearly volume totals 4,560,000 vehicles, and the annual tonnage is 9,200,000. While the average weight of trucks on Route 25 is 9.05

tons, the average over Route 29 is 11.05 tons. Annual pavement maintenance totaled \$1,180 per mile, compared with an average of \$166 for the system, a further indication of the heavy usage to which the route is subjected.

#### ROUTE 39

White Horse, Mercer County . . . Channelization was completed of Route 37, South Broad Street, near Trenton, and Route 39, the Borden-town Road. The inability to acquire the necessary rights of way at this location when Route 39 was originally constructed, made it necessary to revise the plans for constructing a circle.

A smaller channelized intersection was constructed for the improvement of traffic conditions. Motorists were detoured with a minimum of interference during construction. A series of modern illuminated directionary signs add to the efficiency of the new improvement.



## ROUTE 35

Manasquan River Bridge, Monmouth and Ocean Counties . . . The present crossing of the Manasquan River between Brielle and Point Pleasant has been obsolete for a number of years. For some time consideration has been given to its replacement with a more adequate structure. Its need became imperative with the failure of one of the piers in August of 1946.

The new crossing will be located immediately east of the existing bridge. It will have a total length of 2,000 feet, exclusive of the improvements on both approaches. Two roadways, each 32 feet wide, flanked by six-foot sidewalks, will be provided, separated by a four-foot median strip.

The drawspan will be of the double bascule type with a horizontal clearance of 90 feet, and a minimum vertical clearance of 30 feet above mean high water. This will eliminate more than 85 percent of the present openings for navigation.

## ROUTE 37

Island Heights-Seaside Heights Bridge, Ocean County . . . Plans were completed for a new bridge across Barnegat Bay between Island Heights and Seaside Heights to replace the existing timber structure. The present bridge is inadequate for modern traffic, both in strength and width. The drawspan is in a hazardous condition and is a menace to navigation.

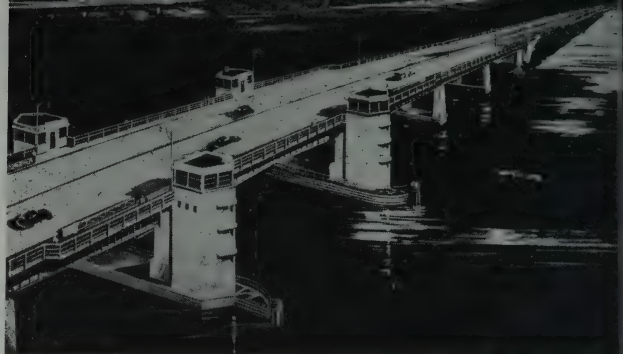
The new crossing, two miles long, will provide dual roadways, each 28 feet in width, separated by a nine-foot median strip, with three-foot emergency walks. It will be of concrete and steel throughout.

The movable span of the double-leaf bascule type will provide a vertical clearance of 30 feet above mean high water. This clearance will eliminate 90 percent of the present openings for marine traffic.

Present contracts include the construction of a half width structure which will provide a roadway 28 feet in width for two lanes of traffic. The remaining half width of the new structure will be constructed immediately following completion of the first half.

## ROUTE 44

Westville to Verga, Gloucester County . . . The construction of a dual highway and an over-



ROUTE 35—MANASQUAN RIVER BRIDGE.



ROUTE 37—ISLAND HEIGHTS-SEASIDE HEIGHTS BRIDGE—OCEAN COUNTY.

pass carrying north-bound Route 44 over south-bound Route 45 was completed in December. An unusual feature of the dualization was the separation island of a city block, containing residential and business properties.

Traffic at this location totals 3,250,000 vehicles per year. Being an important farm to market route, the ratio of trucking to traffic is relatively high—amounting to 6,000,000 tons.

Plans are underway to extend the dual highway improvement southerly through Gloucester County for an additional two miles to Pierce's Corner, near Thorofare.

OVERPASS ROUTES 44 - 45—WESTVILLE, GLOUCESTER COUNTY.





## ROUTE S-49

Grassy Sound Bridge, Cape May County . . . The new Grassy Sound Bridge, between Wildwood and Rio Grande in Cape May County, will replace the existing trestle and swing span which is inadequate for highway and marine traffic. The new structure will be 400 feet in length. A movable span of the single bascule type will pro-

vide horizontal clearance of 57 feet, and minimum vertical clearance at mean high water of 25 feet. This will eliminate more than 85 percent of the openings for navigation. Two roadways will be provided, each 26 feet in width, separated by a four-foot median strip flanked by six-foot sidewalks.



# II STATE AID

In accordance with the statute \$6,000,000 was distributed among 21 counties. Allotments were made in accordance with the distribution formula based on population, area, and road mileage. An additional \$2,000,000 was distributed on the basis of population and road mileage. An appropriation of \$1,155,000 was also made on the basis of \$55,000 to each county.

In addition to the regular aid there was appropriated \$1,000,000 to the counties on the basis of mileage, population, and area to repair damages to county roads and bridges resulting from the abnormal winter of 1947-1948.

## MUNICIPAL AID

Work was completed on municipal roads in the amount of \$5,472,000. State funds are available for additional projects in the amount of \$8,804,257, some of which accumulated during the war.

In addition to the municipal aid funds allotted by the formula method under Chapter 62, Public Laws of 1947, an additional \$50,000 was granted in each county under this same law to municipalities for construction or reconstruction work.

## FEDERAL AID

This new system, will be second in importance to the Federal Aid Primary System, which includes practically all existing state routes. The secondary system will comprise approximately 1,912 miles, the greater portion of which are county roads.

In apportioning the new system to the various counties, the following factors were selected as being most consistent with conditions prevailing in New Jersey:

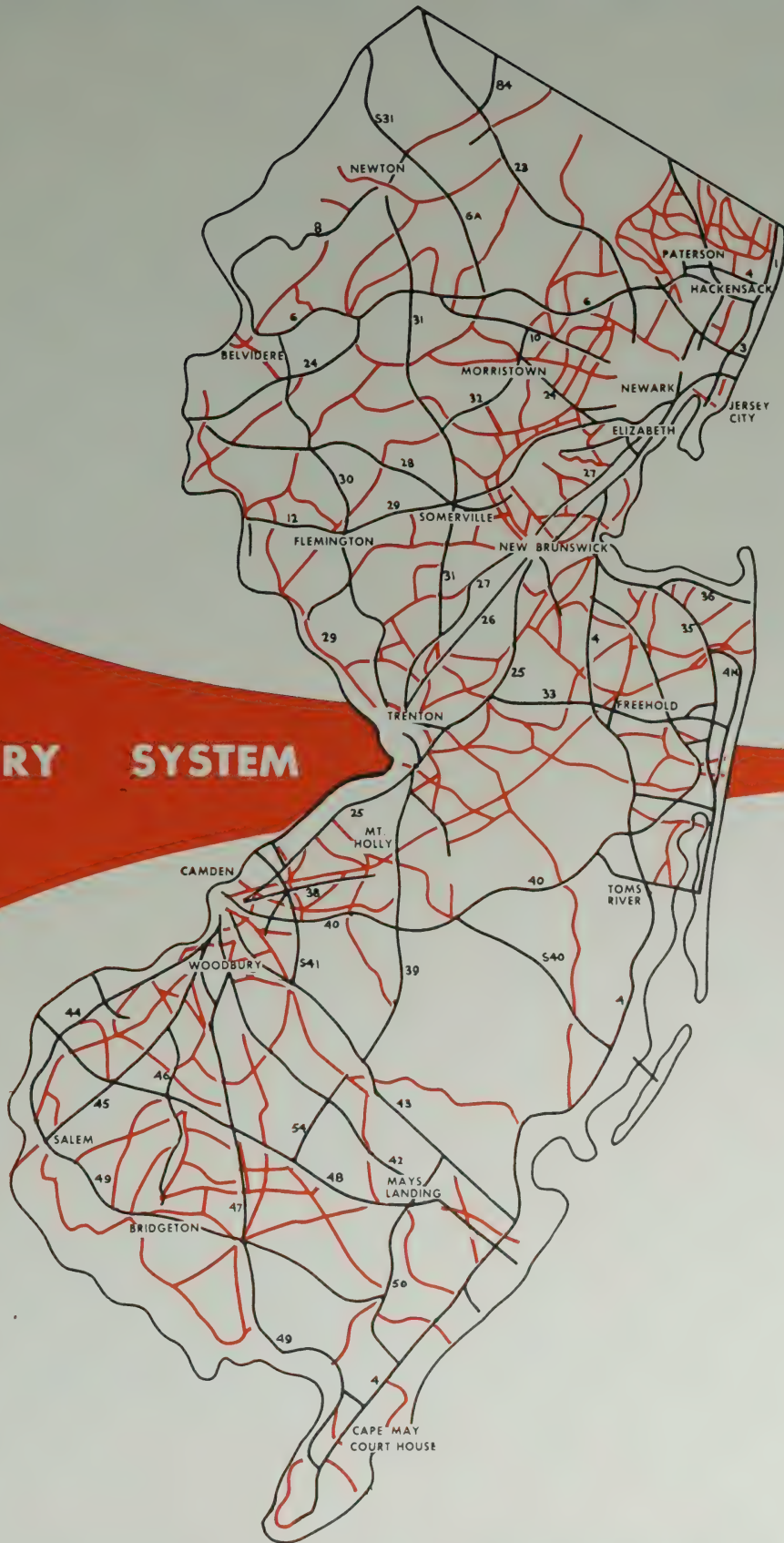
- (1) The rural population in each county
- (2) The vehicle-mileage on rural roads in each county, exclusive of non-local travel
- (3) The number of farms in each county, and in certain counties, the number of recreational establishments.

Other factors included mail and school bus routes. Service rendered by various highways was also considered. From preliminary selection based on the foregoing and other pertinent factors, the routes were plotted and reviewed. Where they paralleled each other, that furnishing maximum service was retained. If selection showed several routes concentrated in one part of a county, and a scarcity in other sections, adjustments were made. Where routes were disconnected, the gaps were closed to the advantage of traffic. They were also made continuous across county boundaries, as well as with inter-state connections.

Of the 1,912 miles comprising the new system, 94 percent are county roads, four percent municipal, and two percent state routes. Many roads in the new system are improved, principally with a low-type surface.



# SECONDARY SYSTEM



# III MAINTENANCE

Normal maintenance operations were considerably expanded by the bituminous resurfacing of many of the older concrete pavements. In addition to lengthening the life of these surfaces, the riding conditions have been greatly improved. Public reaction has been decidedly favorable.

The maintenance costs of the road-bed and right of way of the system totaled \$2,722,000. Pavement maintenance for the fiscal year decreased from \$1,638 to \$1,537 per mile. The reduction was principally in concrete and bituminous concrete. There is, however, an extensive backlog of mud-jacking of concrete pavements to be performed, and it is anticipated that higher maintenance costs will result.

## BRIDGES

There was no significant change in bridge maintenance. Materials were requisitioned to care for erosion disclosed during the previous year. A large portion of this work was completed; material delays prevented full completion. Materials were also requisitioned for the reconstruction of several of the bridges over the Delaware and Raritan Canal.

## SIGNS

A new manual on Uniform Traffic Control Devices for Streets and Highways was issued. It, however, contained a large number of factors requiring considerable study and, as a result, it has not yet been possible to put the new standards fully into force. Also, 4,856 signs were repainted in the field and an additional 2,915 were reconditioned at the Fernwood Plant. To replace the old standard signs, 1,150 new "stop" signs were erected.

Studies were continued as to the type and placement of direction and warning signs, particularly as to the use of fewer town names. This was carried on day and night, in all types of weather, for the development of the best sign types.



BITUMINOUS RESURFACING OF CONCRETE PAVEMENTS.



SIGN BRIDGE—ROUTE 25.



An outstanding feature of this research was the new bridges which support illuminated signs over Route 25 near Newark, to indicate the proper lanes for through and local traffic.

### MARKINGS

Traffic line painting on the various routes totaled 6,509,750 lineal feet. The cost per painting and the over-all cost increased slightly. Difficulty was encountered in securing satisfactory traffic paints because of basic material shortages. Some experimental work was performed with the use of beaded paint.

### SNOW REMOVAL

This program, embracing 1,704 miles, totaled \$1,554,541 in cost, the highest of record. Ice-control represented 49 percent of this expenditure.

The severest storm recorded was a fall of 30 inches following the Christmas Holiday. Resulting conditions were of a most serious nature; in the metropolitan area they were the worst ever encountered, operations being interfered with by abandoned trucks, buses and passenger vehicles. The state routes, however, were opened before New York City streets were cleared and traffic permitted to enter that city in a normal manner.

### PERSONNEL

Manpower remained a critical problem throughout the year. Not only was there a serious shortage of hourly employees, but this group now includes a large percentage of men in the upper-age brackets. At present, approximately 50 percent of the hourly personnel is in excess of 50 years of age. The average service is slightly in excess of 10 years.

This is a serious situation, especially in emergency snow removal and ice control operations. These older men are no longer physically able to put in long hours of overtime and to withstand the rigors of unfavorable weather. As a result, the Department has been seriously handicapped in carrying out its winter safety control program.

The following tables show the age status of employees in the various classifications as of December 31, 1947.

#### HOURLY PERSONNEL

AGE GROUP	NUMBER OF EMPLOYEES	AVERAGE YEARS OF SERVICE
70 to 83	79	13½
65 to 70	83	12½
60 to 65	118	12 plus
55 to 60	118	10 plus
51 to 55	115	11
40 to 50	234	11 plus
30 to 40	200	7 minus
20 to 30	97	2¼
19 to 20	2	1½
	1,046	

This condition also extends into the supervisory personnel:

#### SUPERVISORY PERSONNEL

AGE GROUP	NUMBER OF EMPLOYEES	AVERAGE YEARS OF SERVICE
Over 70	1	35½
60 to 70	5	29
50 to 60	4	17

Ten Supervisors — average age 62½ years.

AGE GROUP	FOREMEN NUMBER OF EMPLOYEES	AVERAGE YEARS OF SERVICE
Over 70	3	28
60 to 70	15	18 $\frac{1}{2}$
50 to 60	34	16 $\frac{3}{4}$
40 to 50	30	19 $\frac{1}{2}$
30 to 40	9	16

91 Foremen — average age 51 $\frac{1}{2}$  years.

AGE GROUP	ASSISTANT FOREMEN NUMBER OF EMPLOYEES	AVERAGE YEARS OF SERVICE
Over 70	3	20
60 to 70	10	22
50 to 60	19	17
40 to 50	17	16
30 to 40	19	13 $\frac{1}{2}$
20 to 30	1	8 $\frac{1}{4}$

69 Assistant Foremen — average age 49 $\frac{1}{2}$  years.

Unless measures are taken to attract younger men to state employment, the maintenance personnel will soon be composed of a high percentage of superannuated men. One of the elements retarding the employment of younger men is the rate of compensation. While the state service holds certain advantages in permanence, vacation and sick leave, the difference between the rates of pay in industry and other employment is so great that no consideration is given to these admitted advantages.

Measures must be supported to bring the compensation of public employees more in line with the salaries and wages being paid in business and industry, and with present-day living costs.

#### LANDSCAPE IMPROVEMENTS

Additional planting and other beautification operations were undertaken along the Blue Star Drive on Route 29.

The history of the Blue Star Drive is more than the story of a memorial; it is the recounting of the birth of a cooperative relationship between the Department and various citizen groups of the State. Five years ago a conference on roadside improvement of civic and business groups resulted in the creation of a continuation committee upon which the Garden Club and the Roadside Council were represented. One of the recommendations was that one of the State's main highways be planted with flowering dogwoods as a war memorial. Following this, the Legislature designated Route 29, between North Plainfield and Mountainside, in Union and Somerset Counties, as the Blue Star Drive, as a living memorial to the men and women of the Armed Forces from New Jersey.



BLUE STAR DRIVE—ROUTE 29—UNION COUNTY.



## MAINTENANCE EXPENDITURES—STATE HIGHWAY SYSTEM—1947-1948

### ORDINARY MAINTENANCE

Drains, Ditches, Unpaved Shoulders .....	\$1,291,000
Surface—Traveled Width .....	420,000
Paved Shoulders .....	79,000
Guard Rail and Fences .....	53,000

### EXTRAORDINARY REPAIRS

Resurfacing, Rebuilding, Heavy Patching—Main Pavement	401,000
Rebuilding Drains, New Ditching, Rebuilding Unpaved Shoulders .....	350,000
Replacing Guard Rail and Fences .....	68,000
Rebuilding Paved Shoulders .....	22,000
Miscellaneous .....	38,000

---

TOTAL—ROADBED AND RIGHT OF WAY .....	\$2,722,000
--------------------------------------	-------------

SNOW REMOVAL & ICE CONTROL .....	1,554,541
----------------------------------	-----------

BRIDGE MAINTENANCE .....	421,601
--------------------------	---------

SIGNS & SPECIAL WORK .....	295,633
----------------------------	---------

LANDSCAPING & ROADSIDE IMPROVEMENTS .....	214,568
---	---------

---

GRAND TOTAL .....	\$5,208,343
-------------------	-------------

# IV ELECTRICAL

There were 52,906 openings of the 38 movable span bridges for the passage of marine traffic—an increase of 11 percent. Better efficiency has resulted from the assignment of additional personnel to certain bridges in the shore area during the summer, and the small number of control and machinery failures.

Two of the bridges which account for 11 percent of the openings were operated under technical difficulties. The channel of the Manasquan River on Route 35 was restricted to 28 feet, and the bridge at Beach Thorofare on the Absecon Boulevard in Atlantic County was operated by emergency gas engines.

## HIGHWAY SAFETY LIGHTING

Lighting was continued under the 100 percent state program, the state and county joint participation plan, and the municipal reimbursements programs.

New units were approved for installation at 282 locations. A total of 15,418 units are now in operation.

A comprehensive study of glare was undertaken for improvement of luminaire design. Experiments were also underway to improve existing units through the elevation of the light center to reduce the angle of the maximum light beam.

Revisions in utility rates reduced by 30 percent operational costs in areas served by the Jersey Central Power and Light Company. This resulted in an annual saving of \$41,339 to the municipalities and the State.

## TRAFFIC SIGNALS

A fixed-time progressive system was placed in operation on Penn and Linden Streets in Camden, the entrance and exit arteries to the Delaware River Bridge. This has reduced delay and congestion to a minimum. A new control system was also installed at Route 25 and Lawrence Street, in Rahway, Union County.

Thirty-eight new signals were placed in operation. Five additional are under construction and nine have been approved for installation.

## ELECTRIC SIGNS

Twenty-six new neon signs with visibility up to 800 feet were installed over the roadways on the dual-dual expressway, Route 25, between Newark and Elizabeth.

A new type of electric sign was also placed in operation on the Pulaski Skyway, at the intersection of Routes 25 and 39 in Bordentown, and at the White Horse Channelization in Mercer County.

Seven hundred and seventy-nine electric signs are in operation at 86 locations on the system.





LIGHTING—ROUTE 25 EXPRESSWAY—NEWARK-ELIZABETH.



ELECTRIC CONTROL BOARD—PASSAIC RIVER BRIDGE—ROUTE 25.



ELECTRIC SIGN—ROUTES 37-39—WHITE HORSE—MERCER COUNTY.

# V EQUIPMENT

Equipment operations are centered in the main plant and garage located at the Fernwood Plant near Trenton. Eight other stations, located at convenient points about the State, service equipment operations in the several areas.

The main garage and auxiliary stations service and maintain 2,429 units of state-owned equipment.



WALTER "SNOW FIGHTER"



MACK SNOW PLOWS

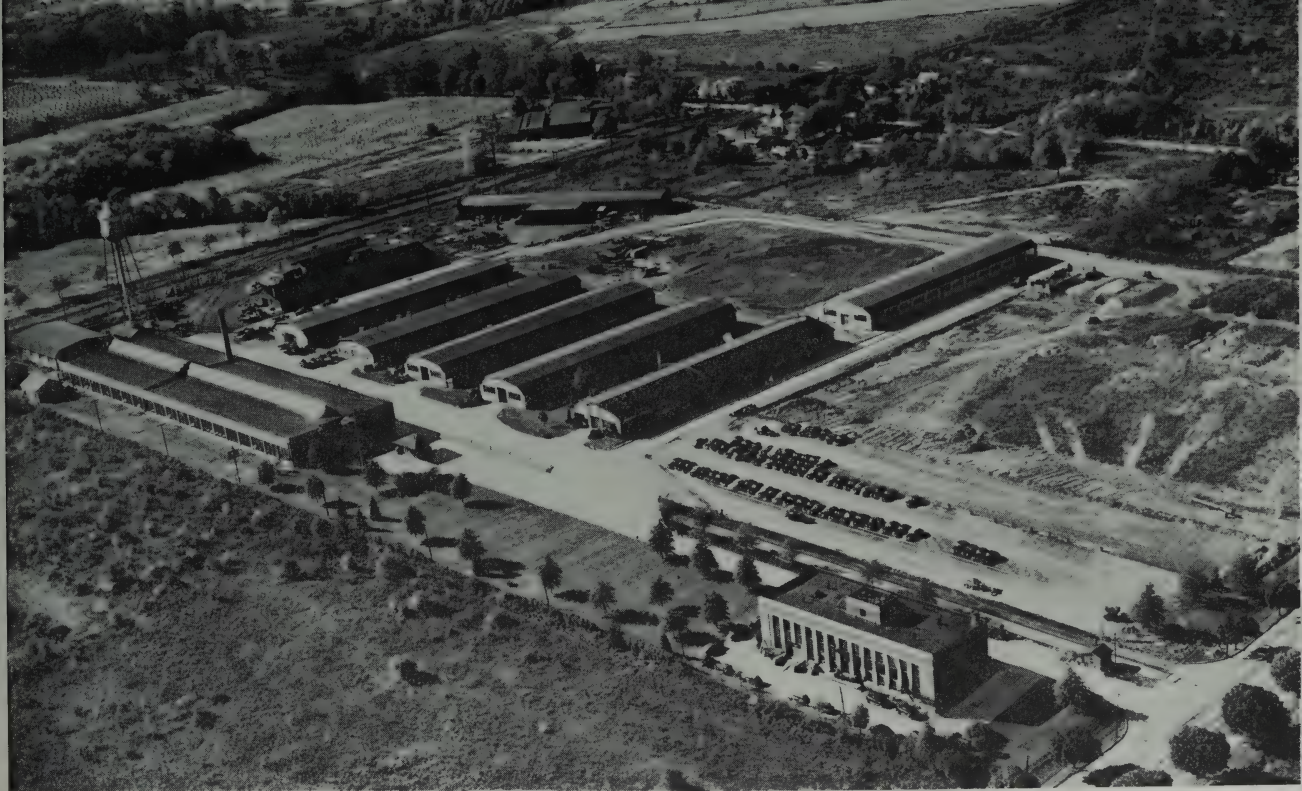
## EQUIPMENT

Snow Plows .....	603
Trucks .....	446
Passenger Cars .....	378
Spreaders .....	208
Air Tools .....	122
Tar Kettles .....	93
Graders .....	74
Mowing Machines .....	70
Power Lawn Mowers .....	65
Miscellaneous .....	58
Pumps .....	55
Lawn Tractors .....	49
Mixers .....	43
Weigh Batches .....	28
Air Compressors .....	20
Rollers .....	16
Spray Outfits .....	15
Loaders .....	12
Traffic Line Markers .....	12
Mud Jacks .....	8
Plows .....	8
Power Buckets .....	8
Trailers .....	8
Vibrators .....	7
Rotary Screens .....	6
Sweepers .....	6
Water Wagons .....	5
Tractors .....	3
Bituminous Finishers .....	2
Electric Hammer .....	1

---

TOTAL ..... 2429

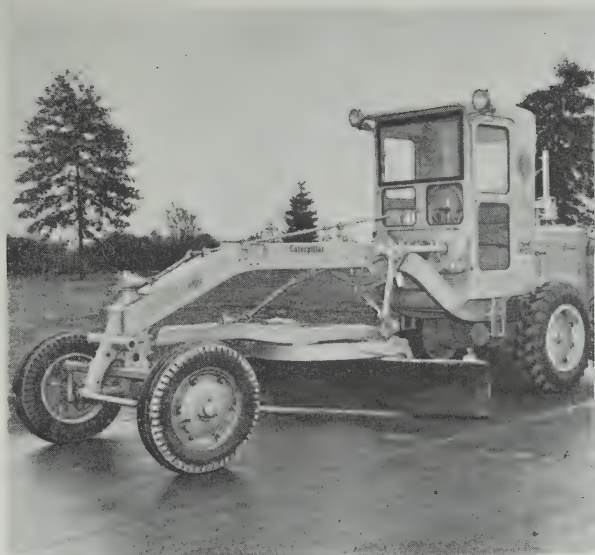




MAIN PLANT AND GARAGE AT FERNWOOD NEAR TRENTON.



FOUR-WHEEL DRIVE "SNOW FIGHTER"



CATERPILLAR DIESEL ROAD GRADER

# VI LAND

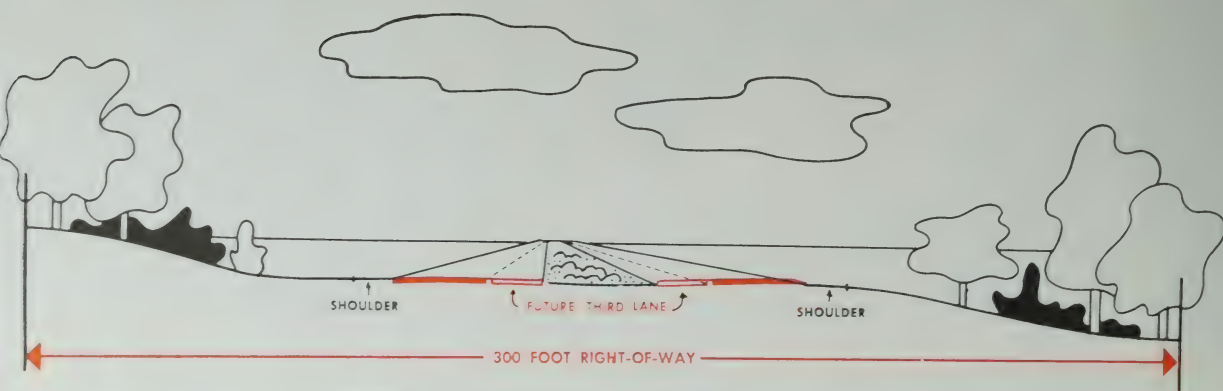
Lands were acquired for rights of way on 50 sections of the system in 15 counties. The properties purchased without resorting to condemnation compared favorably with former years.

Of the 636 new acquisitions, 430 properties were acquired by direct agreement, and 37 settled by compromise after condemnation had been instituted. At the close of the year awards had been rendered on 3 cases and condemnation proceedings were underway on 76 parcels. Many of these will be acquired by compromise, thus increasing the percentage of properties acquired without actually resorting to condemnation.

## PARKWAYS AND FREEWAYS

A large number of the properties required for Route 4 Parkway and Route 100 Freeway were acquired by the close of the year. Many of the tracts on these "controlled access" facilities left land-locked because of the denial of access, have been acquired in fee, at prices only slightly above the value of the parcels required, and damages to the remainder. Aside from the advantage of acquiring land rather than paying damages, their acquisition facilitates settlements on the basis of an exchange of land. They can also be utilized for additional highway improvements, or sold later to the advantage of the State.

Of the properties acquired on the Route 4 Parkway, 76 percent of the owners retained their buildings for removal to new locations. On the Route 100 Freeway, 80 percent retained their homes for similar purposes.



TYPICAL CROSS SECTION ROUTE 4 PARKWAY



# VII TESTING

The Laboratory received 11,374 samples of various materials for examination, testing and report, an increase of 12 percent. Some 54,800 individual tests were performed.

**Engineering**—This unit tests all material used in Portland cement structures, such as aggregates, Portland cement and reinforcing steel, in addition to brick, concrete block, pipe of various kinds and castings. Tests were made on 7,033 samples, requiring 35,852 separate tests.

**Portland Cement and Concrete**—There was received 1,662 samples requiring 20,027 individual tests. Of these, 1,066 were Portland, high early, air-entraining and white cements, representing 532,000 barrels, of which 28,600 were rejected.

Operations were increased due to the greater use of the new air-entraining cement in practically all concrete pavements. This is a new type of cement which produces air in a certain condition in the concrete, making it immune to the action of salt used for de-icing purposes.

Representatives of the Department made 57 special investigations of projects under construction. These included the use of air-entraining cements and air-entraining agents, methods of determining air constant in concrete, casting of special test specimens, and soil-cement construction.

**Bituminous Testing**—This comprises bituminous materials such as tars, asphalts, asphalt emulsions, bituminous concrete and sheet asphalt mixtures taken at asphalt plants, pavement samples cut from the roadways, and investigational work. There was received 4,132 samples requiring 16,000 individual tests.

## FIELD INSPECTION

Various types of materials were inspected at production points before shipment, to insure compliance with the specifications.

**Aggregates and Concrete Pipe**—There were inspected and approved at the point of production 9,301 tons of concrete sand and 52,959 tons of stone.

Specimens were also secured and tested representing 163,276 lineal feet of reinforced concrete pipe, 22,468 lineal feet of plain concrete pipe, and 26,113 feet of clay pipe.

**Steel and Castings**—Samples were tested and inspected of reinforcing steel, representing 4,726,971 pounds.

Inspections were made of casting units, used primarily for catch basins, etc., representing 1,302,796 pounds.

**Concrete Cores**—To determine if the depth of concrete is in accordance with contract requirements, cores are cut from all concrete pavements. In addition to their depth, the cores are tested for compressive strength to indicate the quality of concrete. Five hundred and ninety-three cores were cut from pavements for analysis.

**Bituminous Materials**—An inspector was maintained in the New York District for the purpose of inspecting bituminous material such as tars, asphalt and road oils at the point of production. Samples of materials at the various refineries in the New York area were taken, representing 65½ million gallons, of which 20 percent was used on road contracts in New Jersey. The total used was approximately 14 million gallons.

The bituminous field unit also inspected and supervised the preparation at the point of production of 154,667 tons of bituminous concrete and sheet asphalt mixtures used on new construction and for state and county maintenance, an increase of approximately 20 percent.

### RESEARCH

Investigation was undertaken to determine the proper type of sub-base or material to assure permanent foundations for state roadways. Study of failures on many of the older pavements indicates that methods of compaction in use for several years are proving unsatisfactory because of the increased number, size and weights of modern vehicles. Many failures have been due to the compaction of foundation soils under repeated abnormal traffic loads.

Research has also indicated defects in pavement design, both in the type and spacing of joints, and the reinforcement used. Joints in the conventional design of concrete pavements, constructed in the past, have been a major cause of many difficulties. Despite improvements in pavement design, the joint has remained a point of weakness.

The new design evolved to overcome this is known as the continuously-reinforced pavement. Research projects recently constructed in other states, as well as in New Jersey, have established a system of accurate reference lines and points, so that precise measurements can be made over a period of years and the data correlated and assembled for the influencing of future design.

Two sections of continuously-reinforced pavement were constructed on Route 25 in Middlesex and Mercer Counties, which carries a large volume of heavy truck traffic. The sections are one mile in length. One of the pavements is eight inches thick, and the other ten inches, with different amounts of steel reinforcement carried through and built as one continuous slab.

### DRAINAGE

Until a few years ago, drainage was merely a problem of getting water across and away from the highway by use of natural and man-made stream courses. It is now a major problem due to the development of business and housing along highways. Many areas of land which have remained dormant due to marshy conditions and other undesirable features, have, with the development of the highway and the increased flow of traffic, become desirable building and business sites. They have been filled or leveled off, making major changes in the natural drainage and creating many serious problems. At one location in South Jersey, drainage changes have caused an important highway to flood to a depth of two feet or more during heavy rains. The number of these unusual drainage problems steadily increased through the year.

### RUTGERS UNIVERSITY JOINT RESEARCH

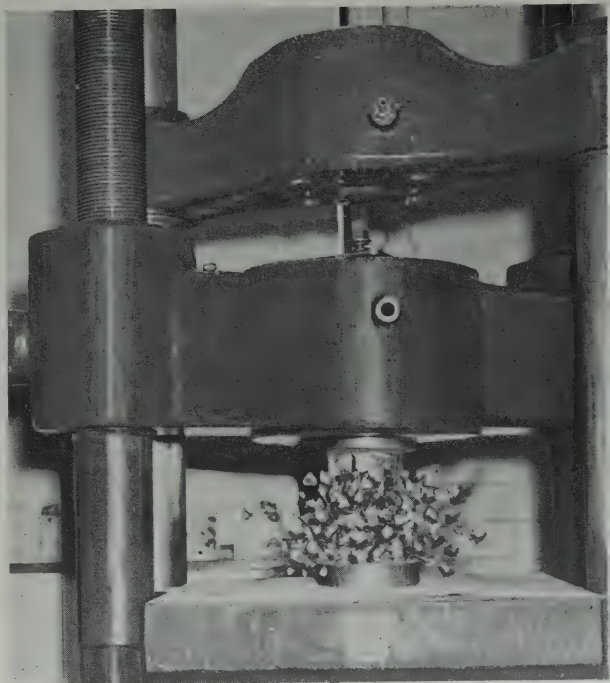
Research was conducted in cooperation with Rutgers University for the advancement of the science of roadbuilding in New Jersey. A joint committee, consisting of six members of the staff of the University and six members of the Department, is concerned primarily with the evaluation of soils and their engineering value for highway and bridge construction.



The first project included the development, by means of aerial photographs, of soil and drainage maps for the entire State which can be used by engineers interested in highway and bridge construction. This information will be published for the use of all interested parties. Further research will be carried out under the joint committee's sponsorship as the need develops and personnel is available.



CUTTING CORE FROM PAVEMENT.



TESTING CONCRETE CORE

### STABILIZED TURF SHOULDERS

In the late spring experimental stabilized turf shoulders were designed and constructed on Route 30 between Woodville and Ringoes in Hunterdon County, by the use of a hay mulch. It was found that a good stand of turf could be established on a stabilized shoulder of topsoil, bankrun sand, and 2½ inch stone aggregate.

This type of shoulder has proven satisfactory in dry and wet weather for passenger vehicle use during the late summer and fall. It also provides a safe place for emergencies and repairs. Its use will also generally improve the appearance of the new "controlled access" parkways and reduce the cost of shoulder maintenance.



STABILIZED TURF SHOULDERS—ROUTE 30—HUNTERDON COUNTY.

**PLANNING**

**and**

**FINANCE**



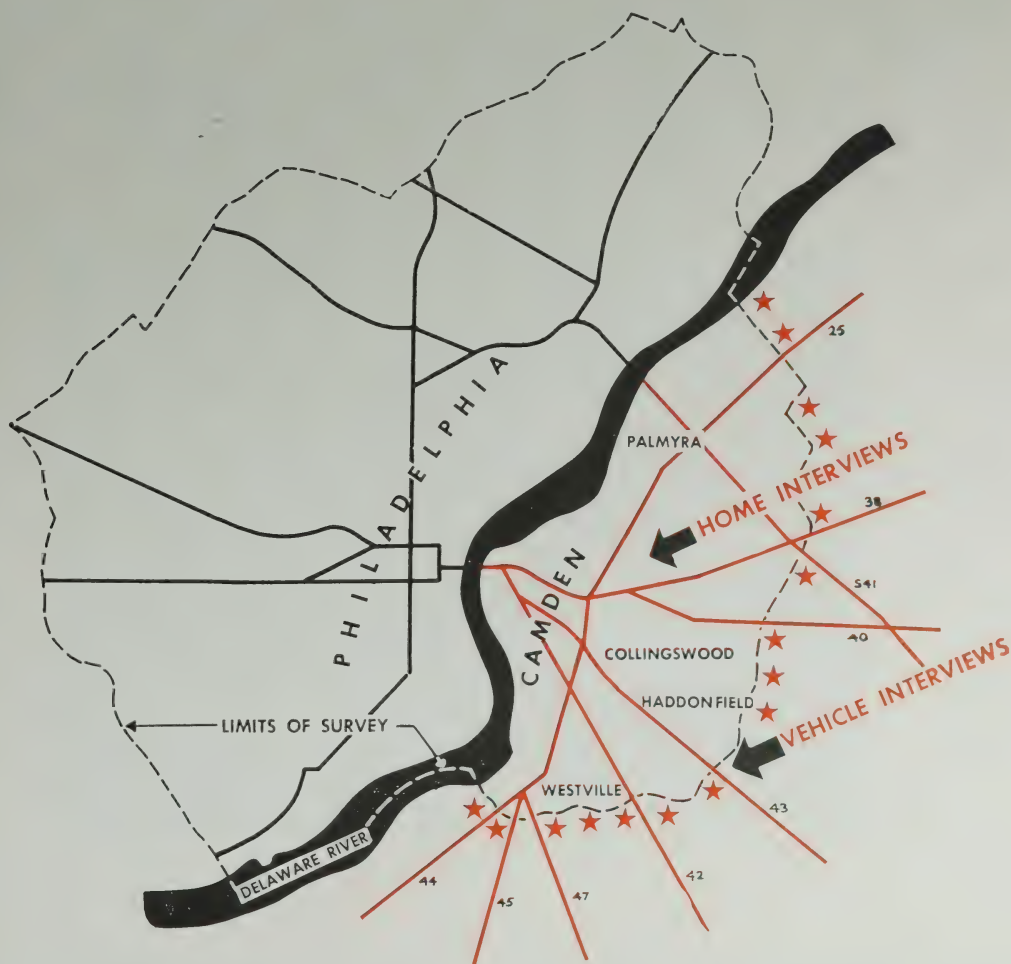
# PLANNING

## ORIGIN AND DESTINATION TRAFFIC SURVEY CAMDEN-PHILADELPHIA METROPOLITAN AREA

This survey was conducted through the latter half of 1947. The New Jersey State Highway Department, Pennsylvania Department of Highways, City of Philadelphia and the Public Roads Administration participated. The states conducted the survey on their respective sides of the river. Procedures were identical, and all operations coordinated.

### PURPOSES

It is in and adjacent to urban areas that traffic is delayed, causing inconvenience, loss of time, increased fuel consumption, irritation and fatigue. Today, practically half of all registered vehicles are owned in cities over 10,000. Over 85 percent of all trips on rural highways have either origin or destination, or both, within municipalities. Larger cities influence traffic patterns up to 35 miles, and cities of 10,000 up to five and six miles. The magnitude of the city problem is, therefore, a combination of the internal movement within it and the volume of traffic attracted from suburban and rural areas.



Narrow streets, intensely developed and highly valued property, constrictive topography and increasing traffic create conditions which must receive careful study and review before expensive construction is undertaken. This necessitates the collection of basic data to determine the proper location for new facilities for overall, long-range improvement programs.

Analysis of traffic flow for specific locations is no longer adequate for the development of a comprehensive city transportation system. Traffic can be counted and the number of vehicles using each street at any period determined. This is not sufficient. Parallel streets offer alternate routes and drivers frequently travel considerable distances to use attractive highways, or to avoid using congested thoroughfares. It is, therefore, not possible to decide where new improvements should be located by observing flows of existing traffic. Only through comprehensive knowledge of origins and destinations of people and materials can there be a certainty as to the correct location and adequacy of such improvements.

### SAMPLING TECHNIQUE

In the past few years there has been a remarkable improvement in city traffic studies through the use of the sampling technique. The metropolitan area traffic study was developed by the Public Roads Administration in cooperation with the Bureau of the Census on the basis of that technique. A substantial sample of the vehicles on principal highways leading into a city can be stopped, and the drivers questioned concerning their origin and destination and other pertinent details. This gives the required information concerning traffic entering or leaving the area, but does not supply information concerning traffic between one point and another within the area itself. It would be impracticable to obtain the data concerning this "internal movement" by stopping all vehicles, because of the heavy traffic streams and the number of streets which it uses.

The most satisfactory method is to interview a representative sample of the people in their homes concerning the travel performed on a particular weekday. When combined for the entire area, it may be taken as typical of the weekday travel for that area.

This is not limited to any particular type or class of travel. All modes of transportation are ob-



PUBLIC  
ROADS  
ADMINISTRATION

INTERVIEWERS QUESTION DRIVERS DURING ORIGIN-DESTINATION TRAFFIC SURVEY.



tained and analyzed. As streets and highway serve both individual and mass transportation, they must be planned with a knowledge of the overall travel requirements if the chaotic conditions existing in metropolitan areas are to be remedied.

#### SURVEY AREA

The New Jersey survey area included 22 municipalities and the City of Camden. The 80 square miles of the survey included 71,000 dwellings, comprising 250,000 inhabitants. Ten percent of the family units were selected for home interviewing and data from these was recorded for 40,000 trips. Interviews from a 20 percent sample of the 8,000 trucks and taxis garaged within the area produced 11,000 trips.

In the roadside interviews, no exact sample was attempted in the field, although limits were placed on its size. The number obtained varied with the ability of the roadside interviewers to record the data without hampering traffic or incurring hazards to the field personnel or vehicle drivers. From the 20 stations operated, information was recorded for 68,000 trips.

The survey was the second conducted in New Jersey. Its successful completion resulted from the cooperation of residents, vehicle owners and motorists traveling within and through the area.

The extensive programs planned for this region include construction and rights of way of an expensive nature. From the findings, data will be available to support economic justifications in route locations, alignments, design of pavement and interchanges and related data of modern highway development.



PUBLIC  
ROADS  
ADMINISTRATION

QUESTIONS CONCERNING THE TRAVEL HABITS OF MEMBERS OF HER HOUSEHOLD ARE ANSWERED BY A HOUSEWIFE DURING URBAN TRAFFIC STUDY.

# II LEGISLATED PARKWAY

The Route 4 Parkway will extend from Paterson in Passaic County to Cape May. There will be a cross-state extension of the parkway from Woodbridge to Trenton.

During the past year alignment was adopted for 8½ miles from Madison Avenue in Paterson, to Bloomfield Avenue in Bloomfield, Essex County. Studies were also underway through Essex County in the vicinity of Irvington, Newark, East Orange and Bloomfield. At present, 23 miles of the parkway have been located north of the Raritan River. In Ocean County 1½ miles have been adopted in the vicinity of Toms River.

With the establishment of alignments through the metropolitan area, it is of the utmost importance that locations be laid down through the counties situated south of the Raritan River. With the industrial expansion in Middlesex and Monmouth Counties, further delay will mean greatly increased acquisition costs for rights of way.

The opening of the parkway in 1949 between the Raritan River and Cranford, in Union County, will increase safety, reduce travel time and generally relieve congestion through the metropolitan area. The shore resorts as well as the Trenton, Camden and Philadelphia areas will also benefit. It will open up a new vista of what these Roads of Tomorrow will mean to New Jersey.

## PALISADES INTERSTATE PARKWAY

Plans for grading, drainage and bridges were completed for the first section of the Palisades Interstate Parkway, extending for 12 miles from the George Washington Bridge Plaza to the New York State line at Alpine in Bergen County. Present appropriations provide for construction from Palisade Avenue, Englewood Cliffs, northerly for 1½ miles.

This new scenic facility, an integral part of the proposed New Jersey parkway system, is located atop the cliffs of the world famous Palisades, overlooking the Hudson River. Its development will protect for future generations this geological formation, and make accessible one of the last natural areas within the metropolitan region. It promises to be a parkway of unusual natural beauty.

## ROUTE 100 FREEWAY

New Jersey will also be served by the Route 100 Freeway, to extend from the George Washington Bridge at Fort Lee to Route 26 in South Brunswick Township, Middlesex County. Legislation has provided for an extension of this freeway from Woodbridge to a connection with the proposed Delaware River Bridge at Deepwater in Salem County.

Freeways have also been legislated in the Newark, Jersey City and Camden metropolitan areas, where lack of these facilities is causing transportation difficulties, deterioration of property values and the migration of population to other areas because of extensive traffic congestion in these regions.



# S AND FREEWAYS

PALISADES INTERSTATE PARKWAY

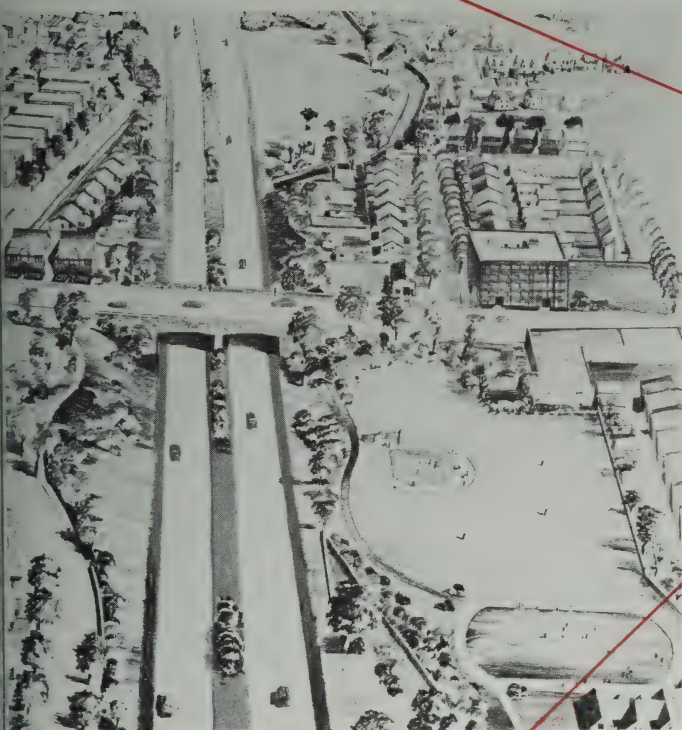
BAYONNE FREEWAY

ROUTE 100 FREEWAY

ESSEX FREEWAY

CROSS STATE PARKWAY

TRENTON FREEWAY



ROUTE 4 PARKWAY—  
URBAN AREA DESIGN

CAMDEN FREEWAYS

ROUTE 300 FREEWAY

CAPE MAY FREEWAY

ROUTE 4 PARKWAY





# LEGISLATED HIGHWAY

The New Jersey State Highway System comprises the principal arteries of New Jersey's transportation network. Representing only one-sixteenth of the State's 28,000 miles of roads and streets, it carries more than one-third of all traffic.

Its major deficiency today is one of abnormal congestion. The traffic density over each mile of state highway averages 7,000 cars per day. There is a daily maximum of 56,000 vehicles per average day on Route 25 near Newark, with many locations carrying in excess of 40,000 cars per average day. Over one-third of the system is carrying traffic volumes in excess of a reasonable and safe capacity, with many routes carrying twice the volumes for which they were originally designed.

## REGISTRATION TRENDS

New Jersey, in 1940, had one car registered for each 3.75 of its people. Present trends indicate a saturation point just below one car for each 2.5 persons. There will, therefore, be a 50 percent increase in registrations without any population change. Several of the counties are potential sources for this increase. They are also the ones where traffic congestion at present is the greatest contributing factor to the lower car-ownership trend, but where the greatest increase in registrations and traffic can be expected.

As a result, within the next two decades, an additional one-third of the system will be carrying over-capacity volumes. Studies also indicate that the remaining one-third of the system, where congestion is now relatively light, will also be carrying over-capacity volumes by 1970, with conditions approaching today's congestion picture.

## FUTURE PROGRAMS

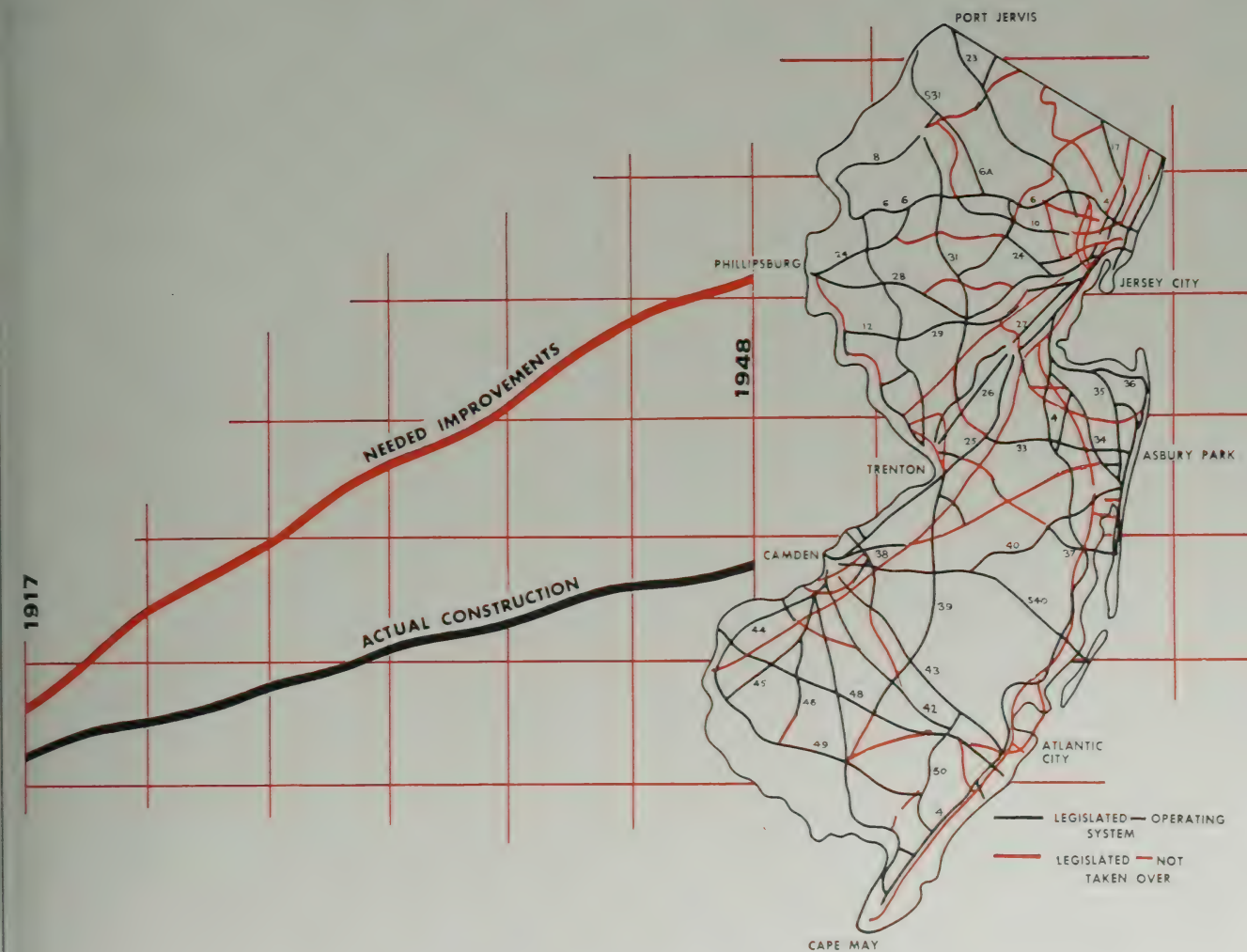
There is, therefore, an accumulation of urgently needed state highway system improvements which cannot be further delayed without serious and adverse effects upon the State's prosperity. New Jersey must invest increased amounts for the building of its legislated state highways and for the reconstruction of present operating routes.

An accelerated highway program is of the utmost importance to the economic and social welfare of New Jersey. People in those areas of the state now suffering from traffic congestion will benefit by the ensuing decrease in accidents, time loss and mental discomfort. The value of the saving in time and operational costs, is estimated to amount to more than one billion dollars.

The urban and rural municipalities of the State will experience large increases in their annual tax incomes, particularly where new facilities are "controlled access" parkways and freeways. The Bronx River Parkway in New York State has shown that the rate of tax income from properties adjacent to this parkway is twice that of similar property beyond its area.

It would be impossible to estimate the money value of the many tangible and intangible benefits resulting from an increased construction program. It is evident, however, that it will represent sums far greater than those invested in it. Vitally needed highway transportation arteries are imperative, if New Jersey is to experience industrial, commercial, residential and recreational expansion.





# IV FINANCE

## STATEMENT OF REVENUES AND APPROPRIATIONS FISCAL YEAR 1947-48 REVENUES

Motor Vehicle Fees, Fines, etc. ....	\$29,306,548.27
Inspection Fees .....	1,073,672.00
Tax on Motor Fuels .....	27,604,605.66
Bus Excise Tax .....	106,694.09
Federal Aid (State Highway Construction) .....	7,435,686.00
Federal Aid (Secondary Roads) .....	1,024,832.00
Miscellaneous Receipts .....	193,698.30
Sale of Highway Bonds (Issue of 1930) .....	7,400,000.00
<hr/>	
TOTAL REVENUE .....	\$74,145,736.32
Reserve and Overrun from Previous Year .....	16,928,000.00

---

TOTAL REVENUE & BALANCE AVAILABLE	
FOR APPROPRIATION .....	\$91,073,736.32



# APPROPRIATIONS

## State Treasurer Debt Service:

State Highway Bonds .....	\$3,613,822.00	
Institutions & Agencies Bonds .....	521,825.00	4,135,647.00

County Aid .....		9,155,000.00
County Aid-Flood Damage Repairs .....		1,000,000.00
Township, Boro & Municipal Aid .....		5,719,825.00

## State Highway Department:

Construction of Roads & Bridges & Purchase of Right-of-Way .....	33,984,863.25	
Maintenance of Highway System .....	5,553,899.96	
Electrical Installation & Maintenance of Lights & Signs .....	1,015,419.30	
Operation of Bridges .....	565,000.00	

## Institutional Roads & Approaches:

Construction .....	751,941.75	
Maintenance .....	330,000.00	1,081,941.75

Plant & Equipment .....	550,000.00	
-------------------------	------------	--

Administration, Engineering, Inspection, and Administrative Cost of Acquiring Right-of- Way .....	3,332,237.45	
---	--------------	--

Secondary & Feeder Roads (Federal Share Only) (Must be matched) .....	1,024,832.00	47,108,193.71
--	--------------	---------------

## Other Related Departments:

Motor Vehicle Dept. ....	2,644,869.34	
Motor Fuel Tax Division .....	353,867.78	
Commerce & Navigation .....	90,000.00	
Delaware River Joint Toll Bridge Commission ..	198,665.44	
State Employees Retirement System .....	255,408.00	
State Police Dept. ....	2,163,187.75	
Teachers Pension and Annuity Fund .....	1,266,556.00	

TOTAL .....		\$74,091,220.02
Unappropriated Balance 6/30/48 .....		16,982,516.30

GRAND TOTAL .....		\$91,073,736.32
-------------------	--	-----------------

# STATUS OF FUNDS FOR THE FISCAL YEAR 1947-48

Contracts &  
Commitments  
July 1, 1947

## CLASSIFICATION OF EXPENDITURES:

Construction of State Highway System:	
Construction of Roads, Bridges and Right of Way .....	\$20,530,422.70
Maintenance of State Highway System:	
Roads and Bridges .....	740,359.94
Electrical Installation and Maintenance:	
Lights and Signs .....	293,730.53
Operation of Draw Bridges .....	3,802.95
Purchase of Plant & Equipment .....	24,183.80
Admin., Engr., Insp., and Administrative Cost of Acquiring Right-of-Way .....	15,467.05
Institutional Roads and Approaches:	
Construction .....	0
Maintenance .....	45,573.38
<hr/>	
TOTAL DEPARTMENT APPROPRIATIONS .....	\$21,653,540.35
County and Township Aid (Mandatory):	
County Aid .....	7,649,745.67
County Aid (Flood Damage Repairs) .....	0
Township Aid—	
Construction .....	5,890,114.44
Maintenance .....	814,988.75
State Treasurers Investment Account .....	0
<hr/>	
TOTAL (COUNTY AND TOWNSHIP AID APPROPRIATIONS) .....	\$14,354,848.86
Federal Aid (Special Allotments):	
Grade Crossings and Hazards .....	498,783.81
Secondary & Feeder Roads .....	5,703.83
Federal Defense Access Projects .....	322,568.23
Miscellaneous .....	324,097.41
<hr/>	
TOTAL (FEDERAL AID SPECIAL ALLOTMENTS) .....	\$ 1,151,153.28
<hr/>	
GRAND TOTAL .....	\$37,159,542.49



# STATUS OF FUNDS FOR THE FISCAL YEAR 1947-48

Allocation Of Funds 1947-48	Disbursements Year 1947-48	Contracts & Commitments June 30, 1948	Balance of Appropriations June 30, 1948
\$45,408,751.53	\$17,436,464.40	\$34,571,895.42	\$13,930,814.41
5,687,545.92	5,227,725.37	943,358.42	256,822.08
734,997.50	729,420.29	299,307.74	0
531,189.62	526,182.10	8,810.47	0
787,966.25	530,348.39	281,801.66	0
3,658,873.31	3,277,767.79	368,986.40	27,586.17
751,941.75	358,091.74	282,952.41	110,897.60
235,561.37	235,098.71	46,036.04	0
<hr/>	<hr/>	<hr/>	<hr/>
\$57,796,827.25	\$28,321,098.79	\$36,803,148.55	\$14,326,120.26
9,156,619.96	11,648,297.08	5,158,068.55	0
1,000,000.00	679,070.39	320,929.61	0
6,568,853.94	5,472,076.18	6,984,323.20	2,569.00
49,915.65	340,882.90	524,021.50	0
928,937.33	0	0	928,937.33
<hr/>	<hr/>	<hr/>	<hr/>
\$17,704,326.88	\$18,140,326.55	\$12,987,342.86	\$ 931,506.33
442,697.55	371,720.35	127,063.46	442,697.55
4,391,236.58	270,596.29	1,371,641.63	2,754,702.49
-186,128.43	136,439.80	0	0
119,329.46	160,774.44	155,716.50	126,935.93
<hr/>	<hr/>	<hr/>	<hr/>
\$ 4,767,135.16	\$ 939,530.88	\$ 1,654,421.59	\$ 3,324,335.97
<hr/>	<hr/>	<hr/>	<hr/>
\$80,268,289.29	\$47,400,956.22	\$51,444,913.00	\$18,581,962.56

NIDOT RESEARCH LIBRARY

NIDOT RESEARCH LIBRARY

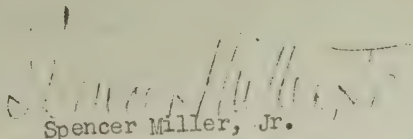




**State of New Jersey**  
**STATE HIGHWAY DEPARTMENT**  
SPENCER MILLER, JR., COMMISSIONER  
TRENTON 1

I am pleased to enclose the Annual Report  
of the New Jersey State Highway Department for the  
fiscal year July 1, 1947 to June 30, 1948.

Very truly yours,

  
Spencer Miller, Jr.  
State Highway Commissioner

SH:MTS





IN REPLY PLEASE REFER TO  
Reports-Annual

**State of New Jersey**  
**STATE HIGHWAY DEPARTMENT**  
DWIGHT R. G. PALMER, COMMISSIONER  
TRENTON 1

11 June 1954

Department of Education  
Division of State Library, Archives & History  
State House Annex  
Trenton, New Jersey

Gentlemen:

I am returning herewith your request card and five copies of our Condensed Annual Report for the years 1942, 1943, 1944 and 1947-48. These are the only years for which we have copies available and the supply of these are so small that five copies of each is all that we can spare. I have tried to pick the cleanest copies available but regret to say that some are slightly soiled. We have not printed any annual reports since the 1947-48 issue.

Very truly yours,

*Edward H. Ruston*

Acting Head File Clerk & Librarian





STATE OF NEW JERSEY  
STATE HIGHWAY DEPARTMENT  
TREASURY & FINANCE  
DIVISION

IN THE YEAR 1925

Department of Finance  
Division of State Highway, Building & Survey  
New Jersey  
TREASURY & FINANCE  
DIVISION

I am returning herewith your request card for the  
copies of the Department report for the year 1925.  
1925, 1926 and 1927-28. These are the only years for  
which we have copies available and the copies of these are  
as well that three copies of each is all that we can spare.  
I have tried to find the department report available but  
failed to get that same was all that could be done.  
and returned my report card and the 1925-26 report.

Very truly yours,

Wm. H. L. 2-2

cc: Mr. H. L. 2-2

NJDOT RESEARCH LIBRARY



3 4310 00003 7492

